### DECLARATION AND POWER OF ATTORNEY

s a below named inventor, I hereby declare that:

ly residence, post office address and citizenship are as stated below at 201 et seq. underneath my name.

The listed at 201 below, or an original, first and sole inventor if only one name is listed at 201 below, or an original, first and joint inventor if plural names are listed at 201 et seq. below, of the subject matter which is claimed and for which a patent is sought on the invention entitled

# METHOD AND SYSTEM FOR DETECTION OF SUSPICIOUS LESIONS IN DIGITAL MAMMOGRAMS USING A COMBINATION OF SPICULATION AND DENSITY SIGNALS

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ntor's e that
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I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

			STATUS		
APPLICATION SERIAL NO.	FILING DATE	PATENTED	PENDING	ABANDONED	
09/103,290	6/23/98		x		
08/676,660	7/10/96	5,815,591	*		

POWER OF ATTORNEY: As a named inventor, I hereby appoint S. Leslie Misrock (Reg. No. 18872), Harry C. Jones, III (Reg. No. 20280), Berj A. Terzian (Reg. No. 20060), Gerald J. Flintoft (Reg. No. 20823), David Weild, III (Reg. No. 21094), Jonathan A. Marshall (Reg. No. 24614), Barry D. Rein (Reg. No. 22411), Stanton T. Lawrence, III (Reg. No. 25736), Isaac Jarkovsky (Reg. No. 22713), Joseph V. Colaianni (Reg. No. 20019), Charles E. McKenney (Reg. No. 22795), Philip T. Shannon (Reg. No. 24278), Francis E. Morris (Reg. No. 24615), Charles E. Miller (Reg. No. 24576), Gidon D. Stern (Reg. No. 27469), John J. Lauter, Jr. (Reg. No. 27814), Brian M. Poissant (Reg. No. 28462), Brian D. Coggio (Reg. No. 27624), Rory J. Radding (Reg. No. 28749), Stephen J. Harbulak (Reg. No. 29166), Donald J. Goodell (Reg. No. 19766), James N. Palik (Reg. No. 25510), Thomas E. Friebel (Reg. No. 29258), Laura A. Coruzzi (Reg. No. 30742), Jennifer Gordon (Reg. No. 30753), Jon R. Stark (Reg. No. 30111), Allan A. Fanucci (Reg. No. 30256), Geraldine F. Baldwin (Reg. No. 31232), Victor N. Balancia (Reg. No. 31231), Samuel B. Abrams (Reg. No. 30605), Steven I. Wallach (Reg. No. 35402), Marcia H. Sundeen (Reg. No. 30893), Paul J. Zegger (Reg. No. 33821), Edmond R. Bannon (Reg. No. 32110), Bruce J. Barker (Reg. No. 33291), Adriane M. Antler (Reg. No. 32605), Thomas G. Rowan (Reg. No. 34419), James G. Markey (Reg. No. 31636), Thomas D. Kohler (Reg. No. 32797), Scott D. Stimpson (Reg. No. 33607), Ann L. Gisolfi (Reg. No. 31956), and Mark A. Farley (Reg. No. 33170), all of Pennie & Edmonds (LP, whose addresses are 1155 Avenue of the Americas, New York, New York 10036, 1667 K Street N.W., Washington, DC 20006 and 3300 Hillview Avenue, Palo Alto, CA 94304, and each of them, my attorneys, to prosecute this application, and to transact all business in the Patent and Trademark Office connected therewith.

(1) CA1 - 105486.1

SEN	D CORRESPONDEN	PENNIE & EDMONDS 1155 AVENUE OF THE NEW YORK, N.Y. 1003	AMERICAS	TELEPHONE CALI & EDMONDS <sub>LLP</sub> D 2803	
	FULL NAME OF INVENTOR	LAST NAME Roehrig	FIRST NAME Jimmy	MIDDLE NAME R.	
0 1	RESIDENCE & CITIZENSHIP	CITY Palo Alto	STATE OR FOREIGN COUNTRY CA	COUNTRY OF CITIZENSH United States	IP
	POST OFFICE ADDRESS	STREET 28 Roosevelt Citcle	CITY Palo Alto	STATE OR COUNTRY  CA	ZIP CODE 94306
	FULL NAME OF INVENTOR	LAST NAME DOI	FIRST NAME Takeshi	MIDDLE NAME	
0 2	RESIDENCE & CITIZENSHIP	CITY Palo Alto	STATE OR FOREIGN COUNTRY CA	COUNTRY OF CITIZENSH United States	IP
	POST OFFICE ADDRESS	STREET 3358 Bryant St.	CITY Palo Alto	STATE OR COUNTRY CA	ZIP CODE 94306
	FULL NAME OF INVENTOR	LAST NAME Karssemeijer	FIRST NAME NICO	MIDDLE NAME	
0 3	RESIDENCE & CITIZENSHIP	CITY Beek	STATE OR FOREIGN COUNTRY The Netherlands	COUNTRY OF CITIZENSHIP The Netherlands	
	POST OFFICE ADDRESS	STREET De Ruvenberg 14	CITY Beek	STATE OR COUNTRY The Netherlands	zip code 6573 DZ
	FULL NAME OF INVENTOR	LAST NAME Te Brake	FIRST NAME Guido	MIDDLE NAME  M.	
2 0 4	RESIDENCE & CITIZENSHIP	CITY Utrecht	state or foreign country The Netherlands	COUNTRY OF CITIZENSHIP The Netherlands	
,j,	POST OFFICE ADDRESS	L. Napoleonplantsoen 48 III	CITY Utrecht	STATE OR COUNTRY The Netherlands	ZIP CODE 3582 TS
,	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
0 5	RESIDENCE & CITIZENSHIP	спу .	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSH	
	POST OFFICE ADDRESS	STREET	CITY	STATE OR COUNTRY	ZIP CODE
	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
2 0 6	RESIDENCE & CITIZENSHIP	СІТУ	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSH	ТР
	POST OFFICE ADDRESS	STREET	CITY	 STATE OR COUNTRY	ZIP CODE

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

SIGNATURE OF INVENTOR 201	SIGNATURE OF INVENTOR 202	SIGNATURE OF INVENTOR 203
Jimmy R. Roehrig	Takeshi Doi	Nico Karssemeijer
DATE	DATE	25/11/90 Kars
SIGNATURE OF INVENTOR 204  Guido M. Te Brake	SIGNATURE OF INVENTOR 205	SIGNATURE OF INVENTOR 206
27-11-59 (-)	DATE	DATE

(2)



### DECLARATION AND POWER OF ATTORNEY

As a below named inventor, I hereby declare that:

and for which a material anniholism.

My residence, post office address and citizenship are as stated below at 201 et seq. underneath my name.

I believe I am the original, first and sole inventor if only one name is listed at 201 below, or an original, first and joint inventor if plural names are listed at 201 et seq. below, of the subject matter which is claimed and for which a patent is sought on the invention entitled

## METHOD AND SYSTEM FOR DETECTION OF SUSPICIOUS LESIONS IN DIGITAL MAMMOGRAMS USING A COMBINATION OF SPICULATION AND DENSITY SIGNALS

□ is attached hereto and includes amendment(	s) filed on		
☑ was filed in the United States on August 27		9/141,289 (for declaration not accompan	nina annication)
with amendment(s) filed on		you declaration not decompare	ying uppitcution)
☐ was filed as PCT international Application	No on	and was amended	under PCT Article 19 on
(if applicable)			
I hereby state that I have reviewed and unders amendment referred to above.	stand the contents of the above	identified application, including	the claims, as amended by any
I acknowledge the duty to disclose information §1.56.	known to me to be material to	patentability as defined in Title 3	37, Code of Federal Regulations,
I hereby claim foreign priority benefits under certificate listed below and have also identified of the application on which priority is claimed	below any foreign application	§119(a)-(d) of any foreign applic for patent or inventor's certificat	cation(s) for patent or inventor's te having a filing date before that
EARLIEST FOREIGN APPLICATI	ON(S), IF ANY, FILED PRI	OR TO THE FILING DATE O	F THE APPLICATION
APPLICATION NUMBER	COUNTRY	DATE OF FILING (day, month, year)	PRIORITY CLAIMED
			YES □ NO □
			YES □ NO □
I hereby claim the benefit under Title 35, Unit	ted States Code, §119(e) of an	y United States provisional appli	ication(s) listed below.
APPLICATION NUMB	BER	FILING	DATE

I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application:

			STATUS		
APPLICATION SERIAL NO.	FILING DATE	PATENTED	PENDING	ABANDONED	
09/103,290	6/23/98		x		
08/676,660	7/10/96	5,815,591	<del>-X -</del>		

POWER OF ATTORNEY: As a named inventor, I hereby appoint S. Leslie Misrock (Reg. No. 18872), Harry C. Jones, III (Reg. No. 20280), Berj A. Terzian (Reg. No. 20060), Gerald J. Flintoft (Reg. No. 20823), David Weild, III (Reg. No. 21094), Jonathan A. Marshall (Reg. No. 24614), Barry D. Rein (Reg. No. 22411), Stanton T. Lawrence, III (Reg. No. 25736), Isaac Jarkovsky (Reg. No. 22713), Joseph V. Colaianni (Reg. No. 20019), Charles E. McKenney (Reg. No. 22795), Philip T. Shannon (Reg. No. 24278), Francis E. Morris (Reg. No. 24615), Charles E. Miller (Reg. No. 24576), Gidon D. Stern (Reg. No. 27469), John J. Lauter, Jr. (Reg. No. 27814), Brian M. Poissant (Reg. No. 28462), Brian D. Coggio (Reg. No. 27624), Rory J. Radding (Reg. No. 28749), Stephen J. Harbulak (Reg. No. 29166), Donald J. Goodell (Reg. No. 19766), James N. Palik (Reg. No. 25510), Thomas E. Friebel (Reg. No. 29258), Laura A. Coruzzi (Reg. No. 30742), Jennifer Gordon (Reg. No. 30753), Jon R. Stark (Reg. No. 30111), Allan A. Fanucci (Reg. No. 30256), Geraldine F. Baldwin (Reg. No. 31232), Victor N. Balancia (Reg. No. 31231), Samuel B. Abrams (Reg. No. 30605), Steven I. Wallach (Reg. No. 35402), Marcia H. Sundeen (Reg. No. 30893), Paul J. Zegger (Reg. No. 33821), Edmond R. Bannon (Reg. No. 32110), Bruce J. Barker (Reg. No. 33291), Adriane M. Antler (Reg. No. 32605), Thomas G. Rowan (Reg. No. 34419), James G. Markey (Reg. No. 31636), Thomas D. Kohler (Reg. No. 32797), Scott D. Stimpson (Reg. No. 33607), Ann L. Gisolfi (Reg. No. 31956), and Mark A. Farley (Reg. No. 33170), all of Pennie & Edmonds LLP, whose addresses are 1155 Avenue of the Americas, New York, New York 10036, 1667 K Street N.W., Washington, DC 20006 and 3300 Hillview Avenue, Palo Alto, CA 94304, and each of them, my attorneys, to prosecute this application, and to transact all business in the Patent and Trademark Office connected therewith.

(1) CA1 - 105486.1

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SEN	D CORRESPONDE	CE TO: SPENNIE & EDMONDS 1155 AVENUE OF THE NEW YORK, N.Y. 100	DIRECT E AMERICAS PENNIE 36-2711 (212) 790	TELEPHONE CAL & EDMONDS <sub>LLP</sub> E 0-2803	
	FULL NAME OF INVENTOR	LAST NAME Roehrig	FIRST NAME Jimmy	MIDDLE NAME R.	
2 0 1	RESIDENCE & CITIZENSHIP	Palo Alto	STATE OR FOREIGN COUNTRY CA	COUNTRY OF CITIZENSI United States	IIP
	POST OFFICE ADDRESS	STREET 28 Roosevelt Citcle	CITY Palo Alto	STATE OR COUNTRY CA	2IP CODE 94306
	FULL NAME OF INVENTOR	LAST NAME Doi	FIRST NAME Takeshi	MIDDLE NAME	
0 2	RESIDENCE & CITIZENSHIP	CITY Palo Alto	STATE OR FOREIGN COUNTRY CA	COUNTRY OF CITIZENSI United States	IIP
	POST OFFICE ADDRESS	STREET 3358 Bryant St.	CITY Palo Alto	STATE OR COUNTRY CA	ZIP CODE 94306
	FULL NAME OF INVENTOR	LAST NAME Karssemeijer	FIRST NAME NICO	MIDDLE NAME	
2 0 3	RESIDENCE & CITIZENSHIP	CITY Beek	STATE OR FOREIGN COUNTRY The Netherlands	COUNTRY OF CITIZENSHIP The Netherlands	
	POST OFFICE ADDRESS	STREET De Ruvenberg 14	CITY Beek	STATE OR COUNTRY The Netherlands	ZIP CODE 6573 DZ
	FULL NAME OF INVENTOR	LAST NAME Te Brake	FIRST NAME Guido	MIDDLE NAME M.	
2 0 4	RESIDENCE & CITIZENSHIP	CITY Utrecht	STATE OR FOREIGN COUNTRY The Netherlands	COUNTRY OF CITIZENSHIP The Netherlands	
	POST OFFICE ADDRESS	L. Napoleonplantsoen 48 III	CITY Utrecht	STATE OR COUNTRY The Netherlands	ZIP CODE 3582 TS
	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
0 5	RESIDENCE & CITIZENSHIP	СПҮ	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENSHIP	
	POST OFFICE ADDRESS	STREET	СПҮ	STATE OR COUNTRY	ZIP CODE
	FULL NAME OF INVENTOR	LAST NAME	FIRST NAME	MIDDLE NAME	
2 0 6	RESIDENCE & CITIZENSHIP	СІТУ	STATE OR FOREIGN COUNTRY	COUNTRY OF CITIZENS	IIP
	POST OFFICE ADDRESS	STREET	CITY	STATE OR COUNTRY	ZIP CODE

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

SIGNATURE OF INVENTOR 201  Jimmy R. Roehrig	SIGNATURE OF INVENTOR 202  Takeshi Doi	SIGNATURE OF INVENTOR 203 Nico Karssemeijer
ulig 198	N /19/88	DATE
SIGNATURE OF INVENTOR 204	SIGNATURE OF INVENTOR 205	SIGNATURE OF INVENTOR 206
Guido M. Te Brake		
DATE	DATE	DATE

OT	IN THE UNITED STATES PATENT AN	D TRADEMARK OFFICE
JAN 0 6	In re S ⊠ Application of: Roehrigl, et al.  □ Patent of:	
TADEN	☐ Serial No.: 09/141,289 ☐ Patent No.:	Group Art Unit: 3737
	☑ Filed: August 27, 1998 ☐ Issued:	Examiner: N/A
	For: METHOD AND SYSTEM FOR DETECTION OF SUSPICIOUS LESIONS IN DIGITAL MAMMOGRAMS USING A COMBINATION OF SPICULATION AND DENSITY SIGNALS	Attorney Docket No.: 8498-027-999
	VERIFIED STATEMENT (DECLARATION) CLA [37 CFR 1.9(f) and 1.27(c)] - Small	
	Honorable Commissioner of Patents and Trademarks Washington, D.C. 20231	
	Sir:	
	I hereby declare that I am	• .
	<ul> <li>□ the owner of the small business con</li> <li>☒ an official of the small business con</li> <li>the concern identified below:</li> <li>Name of concern R2 Technology, In</li> </ul>	ncern empowered to act in behalf of c.
	Address of concern 730 Distel Drive	, Los Altos, CA 94022

I hereby declare that the above identified small business concern qualifies as a small business concern as defined in 13 CFR 121.3-18, and reproduced in 37 CFR 1.9(d), for purposes of paying reduced fees under section 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the person employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern and/or there is an obligation under contract or law by the inventor(s) to convey rights to the small business concern with regard to the invention, entitled METHOD AND SYSTEM FOR DETECTION OF SUSPICIOUS LESIONS IN DIGITAL MAMMOGRAMS USING A COMBINATION OF SPICULATION AMD **DENSITY SIGNALS** by inventors Jimmy R. Roehrig, Takeshi Doi, Nico Karseemeijer and Guido M. Te Brake described in

☐ the specific	cation filed herewith			
M application	serial no.,09/141,289	filed	August 27	, 1998
□ patent no.	issued			

If the rights held by the above identified small business concern are not exclusive, each individual, concern or organization having rights to the invention is listed below and no rights to the invention are held by any person, other than the inventor, who could not qualify as an independent inventor under 37 CFR 1.9(c) if that person made the invention, or by any concern which would not qualify as a small business concern under 37 CFR 1.9(d), or a nonprofit organization under 37 CFR 1.9(e).

FULL NAMEADDRESS				
□ INDIVIDUAL	□ SMALI	BUSINESS CONC		NPROFIT GANIZATION
FULL NAME ADDRESS				
□ INDIVIDUAL		BUSINESS CONC		NPROFIT GANIZATION
FULL NAME ADDRESS				
□ INDIVIDUAL	□ SMALL	BUSINESS CONC		NPROFIT GANIZATION
FULL NAME ADDRESS				
□ INDIVIDUAL	□ SMALI	BUSINESS CONC		NPROFIT GANIZATION
I acknowledge the dustatus resulting in los paying, the earliest ostatus as a small entite	s of entitleme of the issue fee	nt to small entity sta or any maintenance	tus prior to paying fee due after the	ng, or at the time of
I hereby declare that statements made on i statements were mad are punishable by fin United States Code, application, and pate directed.	nformation and with the known or imprison and that such and its	d belief are believed owledge that willful to ment, or both, under willful false statement	to be true; and false statements a Section 1001 onto may jeopardi	further that these and the like so made f Title 18 of the ze the validity of the
Send correspondence Direct Telephone cal	ls to: 1155. New	NIE & EDMONDS Avenue of the Amer York, N.Y. 10036-2 790-9090	icas	
Name of person sign Title of person other Address of person sign Signature	than owner	James W. Pell President 730 Distel Drive Los Altos, CA 940	22 Date	11/19/93
·	7			1.7.

